ABSTRACT

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An improvement to a spread-spectrum receiver at a bse station having a matched filter. A symbol sampler samples at the symbol time T_{s} , a symbol sample from the matched filter. A noise sampler samples at a plurality of chip times kT_c , but not at the symbol time $T_{\rm s}$, a plurality of noise samples from the matched filter. An estimator or low-pass filter filters the plurality of noise samples from the symbol sampler, to generate a noise estimate. A combiner circuit subtracts the noise estimate from the low-pass filter from the symbol sample from the symbol sampler, thereby generating a comparison signal. A magnitude device determines a magnitude of the comparison signal. A comparator has threshold voltage applied to a threshold input. The comparator compares the magnitude of the comparison signal to the threshold voltage, thereby generating the erasure signal. An erasure decoder erasure decodes the input data using the erasure signals from the erasure detector.